

PERMIT APPLICATION

MOUNT TAYLOR MINE

RIO GRANDE RESOURCES CORPORATION

SUBMITTED TO

MINING AND MINERALS DIVISION

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

STATE OF NEW MEXICO

DECEMBER 20, 1994

Prepared by:

AK GeoConsult, Inc.

PERMIT APPLICATION CERTIFICATION

MOUNT TAYLOR MINE RIO GRANDE RESOURCES CORPORATION

I certify that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals responsible for obtaining the information, I believe the submitted information is true, accurate, and complete.

Signed: 

Title: Mine Manager
Authorized Agent for Rio Grande Resources Corporation

Date: 12 - 27 - 94

PERMIT APPLICATION SUMMARY
MOUNT TAYLOR MINE

APPLICANT / ADDRESS:	Rio Grande Resources Corporation P.O. Box 1150 Grants, NM 87020
PHONE #:	505-287-7971
AGENT:	J.C. Lister, Mine Manager
LOCATION:	Sec. 24, T13N, R8W Cibola County
MINE TYPE / COMMODITY:	Underground room-and-pillar, stope / Uranium
PERMIT AREA:	4006.7 acres
Plant Site - Support Facilities	213.9 acres
Plant Site - Mine Water Treatment Area	28.0 acres
Ore Stockpile	6.8 acres
Waste Pile - old	11.5 acres
Waste Pile - new	21.7 acres
Storm Water Retention Ponds (2)	3.7 acres
Access Road	4.7 acres
Pipeline	2.0 acres
DISTURBED AREA - at Time of Application:	147.7 acres
ANNUAL PRODUCTION CAPACITY:	Not Operating at Time of Application

APPLICATION FOR PERMIT FOR AN EXISTING MINE
MOUNT TAYLOR MINE
RIO GRANDE RESOURCES CORPORATION

Rio Grande Resources Corporation (RGR) hereby makes application for a Permit for an Existing Mine in accordance with the provisions of the New Mexico Mining Act, Sections 69-36-1 through 69-36-20, NMSA 1978 and the New Mexico Mining Act Rules of July 12, 1994. Details and further discussion of site information summarized in this application are contained in the Site Assessment submitted in June, 1994.

1.0 GENERAL INFORMATION

1.1 Name of Applicant

The applicant for this Existing Mine permit is Rio Grande Resources Corporation (RGR), a Delaware corporation.

1.2 Location

The surface facilities and headquarters of the Mt. Taylor Mine are located in the east half of Section 24, T13N, R8W, NMPM in Cibola County, New Mexico (see Figure 1). The mine site lies within one mile northeast of the Village of San Mateo and is accessible from New Mexico State Route 605.

1.3 Address and Telephone Number

The address and telephone number of the Mt. Taylor Mine are:

Mt. Taylor Mine
Rio Grande Resources Corporation
P.O. Box 1150
Grants, NM 87020
505-287-7971

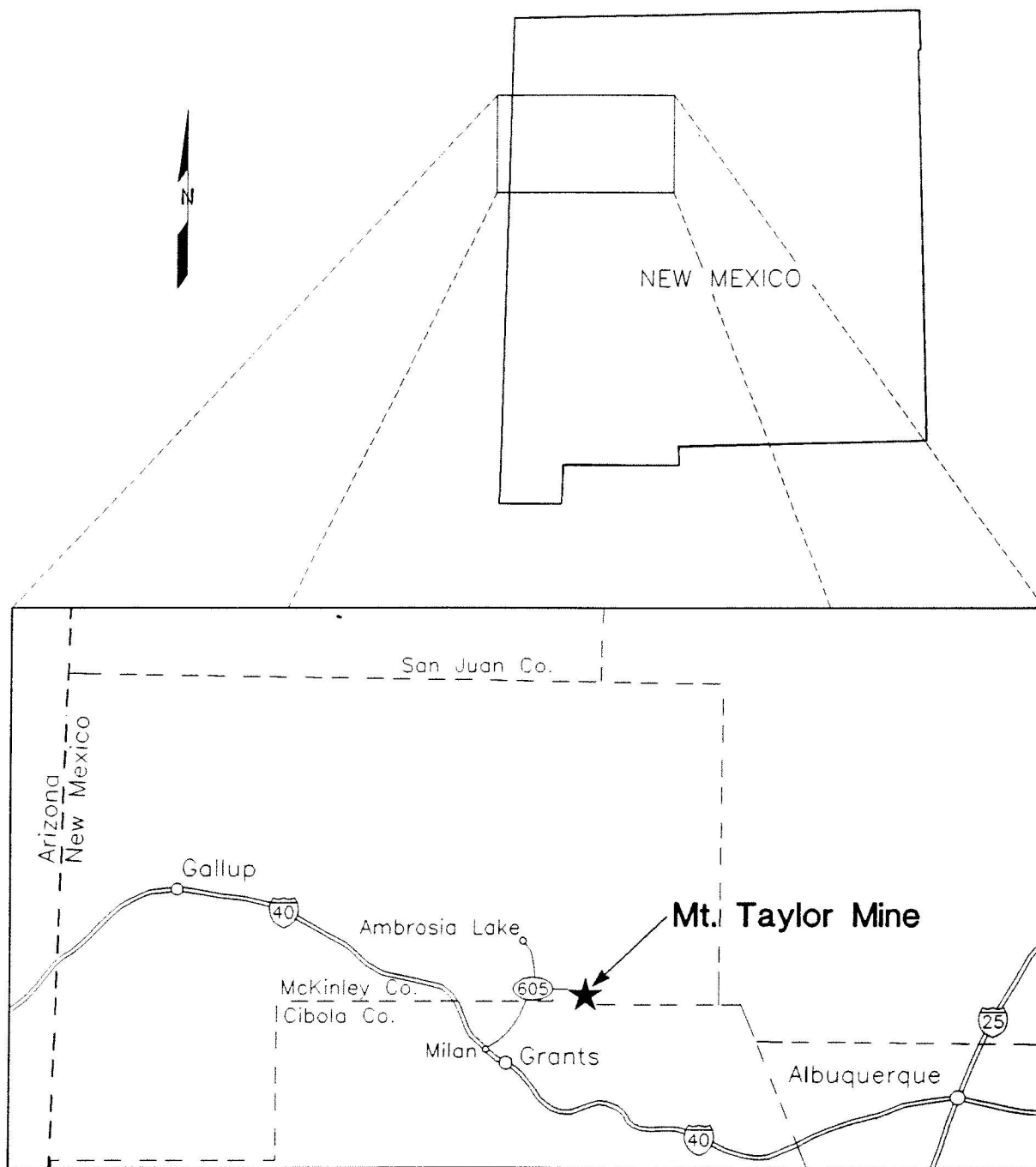


FIGURE 1

SITE LOCATION MAP

MOUNT TAYLOR MINE
RIO GRANDE RESOURCES CORPORATION

Prepared by:
AK GeoConsult, Inc.

1.4 Agent

The Agent for the Mt. Taylor Mine is Mr. J.C. Lister, Mine Manager. The Mt. Taylor Mine manager shall be the contact for all notices and correspondence related to this application and subsequent other matters relating to the mine permit.

1.5 Mine Type and Commodity

The Mt. Taylor Mine extracts uranium ore from depths of over 3,000 feet below ground surface using room-and-pillar and stope mining methods. There are no milling facilities, present or future, within the proposed permit area (Figure 2).

1.6 Basis for Existing Mine Status

Uranium ore was first produced from the Mt. Taylor Mine in 1979 by the original owner and developer, Gulf Minerals. Production continued until September 30, 1982, at which time mining operations were temporarily ceased. Production was resumed in October, 1985 and was suspended in January, 1990. Therefore, the periods of operation include more than two years of production between January 1, 1970 and June 18, 1993, the condition required for classification as an existing mining operation in accordance with the New Mexico Mining Act Rules (Rule 1).

2.0 LAND AND MINERAL OWNERSHIP

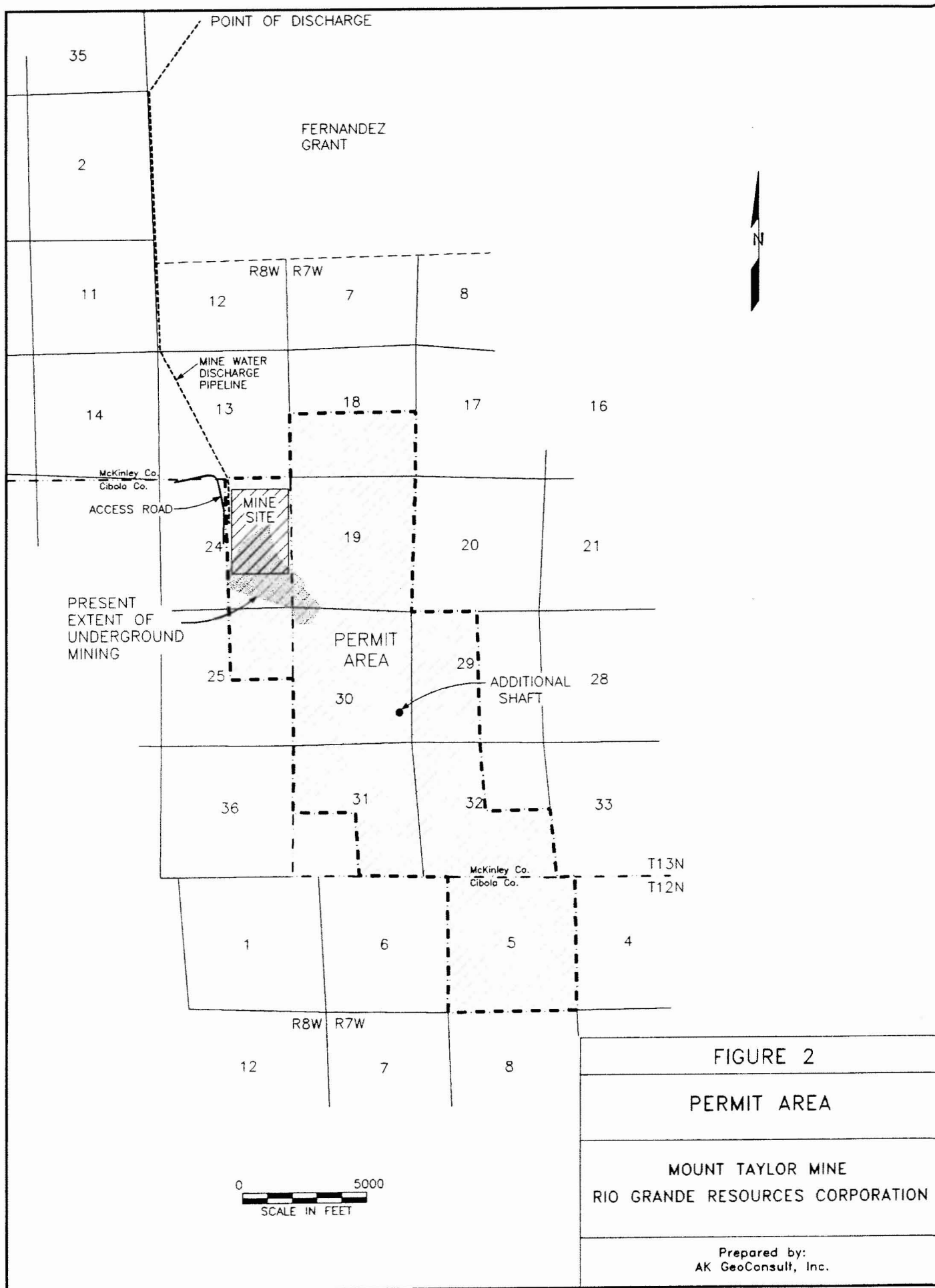
The ownership of surface and mineral estates are listed in Table 1 and illustrated on Figure 3.

2.1 Surface Owners

According to tax records at county assessor offices of Cibola County in Grants, New Mexico and McKinley County in Gallup, New Mexico, the parties listed in Table 1 own land surface within the permit area.

2.2 Mineral Owners

According to tax records at county assessor offices of Cibola County in Grants, New Mexico and McKinley County in Gallup, New Mexico, the parties listed in Table 1 own mineral estates within the Mt. Taylor Mine permit area.



3.0 RIGHT TO ENTER AND CONDUCT MINING

RGR acquired its interest in the Mt. Taylor Uranium Mining Operation effective August 1, 1991 by assignment from Chevron Resources Company (Chevron). RGR's current leasehold position and surface ownership rights, within the proposed permit area as defined on Figure 3 of this application, were acquired by Chevron via the following documentation:

- Mining Leases
- Rights-of-Way
- Surface Use Agreements
- Patents granted on BLM lands
- Warranty Deeds
- Forest Service Special Use Permit
- Water Right Agreements
- Unpatented Lode Mining Claims

These various instruments vest in RGR the right to enter upon the proposed permit premises for purposes of conducting mining operations and, when appropriate, reclamation activities. It is RGR's understanding that all of these instruments/ documents are filed of record in Cibola County or McKinley County, New Mexico. In addition, originals or copies of all pertinent documents are maintained in RGR's Land Department, located in Texas, and are available for review with prior authorization.

4.0 PERMIT AREA

4.1 Permit Area Boundaries

The total proposed permit area for the Mt. Taylor Mine is 4006.7 acres. The proposed permit area is delineated on Figure III in the Site Assessment and on Figure 2 in this application. The permit area includes the plant site and other surface facilities consisting of 285.6 acres, of which approximately 148 acres are disturbed land and 137.6 acres are undisturbed. Approximately six square miles of additional area occupy the surface over the underground mine area. The permit area includes the following:

T12N, R7W, N.M.P.M.:

Section 5:	All	640 acres
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T13N, R7W, N.M.P.M.:

Section 18:	S 1/2	320 acres
Section 19:	All	640 acres
Section 29:	W 1/2	320 acres
Section 30:	All	640 acres
Section 31:	N 1/2 and SE 1/4	480 acres
Section 32:	NW 1/4 and S 1/2	480 acres

T13N, R8W, N.M.P.M.:

Section 24:	E 1/2	320 acres
Section 25:	NE 1/4	160 acres

Pipeline Corridor:

From N 1/4 Corner Section 24 to point of discharge in T14N, R8W, total length 20,200 feet, width 4 feet	2 acres
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Access Road:

From NE/NW/NW Section 24 to center of Section 24, total length 4100 feet, width 50 feet	4.7 acres
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4,006.7 acres

The foregoing tabulation is identical to that presented in the Site Assessment, with the exception that the pipeline corridor and access road have been added. This pipeline is a 24-inch diameter pipe installed at or slightly below ground surface to carry treated mine water to a point of discharge in San Lucas Canyon approximately four miles north of the mine site, as depicted on Figure III of the Site Assessment.

4.2 Influence of Subsidence on Permit Area

The proposed permit area includes all ground surface that will lie above the underground mine workings. This area is proposed for the convenience of RGR and to provide flexibility in the development of the underground mine workings, including the ability to locate vent shafts, wells, etc. in support of the underground workings.

The permit area is not required to account for subsidence from underground mine workings propagating to land surface. Nevertheless, an evaluation of potential subsidence has been performed and is summarized on Table 2. This evaluation indicates that under the most extreme conditions that could reasonably occur in the underground workings - i.e. the largest panel areas, highest extraction ratio, and greatest mine drift height - the maximum height of subsidence propagating upward from the mine workings should be less than 300 feet.

This evaluation is not intended to be a rigorous analysis of subsidence mechanics but, rather, an estimation of the magnitude of subsidence that is likely to be related to underground workings. Actual subsidence is expected to be less than that indicated in this table, primarily because the actual dimensions of underground workings are likely to be less than those used in this evaluation, and the geologic units overlying the mining level contain substantial thickness of sedimentary rocks with a substantial potential for swell.

4.3 Disturbed Area

The total area presently disturbed by the Mt. Taylor Mine is 147.7 acres. This total consists of the following:

Plant Site - Mine Support and Surface Support Facilities	93.0 acres
Plant Site - Mine Water Treatment Area	28.0 acres
Ore Stockpile	6.8 acres
Waste Pile	11.5 acres
Storm Water Retention Ponds (2)	3.7 acres
Access Road	4.7 acres
<hr/>	
Total disturbed area =	147.7 acres

Additional disturbance will result from the development of a second waste pile in the N 1/2 of the NE 1/4 of Section 24 (21.7 acres directly north of the mine water treatment area) and the additional (third) shaft located in the SE 1/4 of Section 30 (about 50 acres).

5.0 DESCRIPTION AND DESIGN LIMITS OF MINE UNITS

For purposes of this permit application, the Mt. Taylor Mine units have been grouped into four categories - mine, plant site - underground support facilities, plant site - surface support facilities, and solid and liquid containments. These units include both those that existed at the time of this application and those that have

been planned but, because of cessation of operations, have not been constructed. Locations and configurations of the mine units are illustrated on Figure 4; and the areas, volumes and capacities of all mine units are tabulated on Table 3.

5.1 Mine

The units in this category consist of all subsurface units of the Mt. Taylor Mine, including shafts and underground workings. The underground mine workings, including all drifts and stopes, and haulageways and other openings for ore extraction are shown on Figure II of the Site Assessment. These underground workings follow the ore body at depths of 3100-3200 feet below ground surface. Future underground workings will be developed as mining progresses and will be based on the mineral values, stratigraphy and structure of the ore body.

An exact description of the underground mine workings cannot be determined at this time and, therefore, is not included in this application. For the sake of setting design limits, the limit of underground workings is the subsurface projection of the surface permit area.

At the time that mining operations were suspended, the shafts of the Mt. Taylor Mine consisted of the main production or haulage shaft (24-foot shaft) and a ventilation/manway shaft (14-foot shaft). In addition, there will be at least one additional shaft at the location shown on Figure 2 in the SE 1/4 of Section 30, T13N, R8W. To meet MSHA regulations for air quality and escapeways, additional shafts will be added if needed as the mining progresses across the permit area. Exact locations and sizes of additional shafts will depend on their position with respect to the underground workings and cannot be determined at this time. For the purpose of establishing design limits, three shafts, in addition to the original two, with diameters of 14 to 24 feet are included in this application.

5.2 Plant Site - Mine Support Facilities

The units in this category consist of those facilities at ground surface that have a direct function in underground mining operations and that will be either removed from the site or converted to post-mining use after closeout. These units supply air for ventilation; pumping of water from the underground space; cooling and heating of underground air; and hoisting of personnel, materials and ore to and from the underground mining levels. The present mine support facilities include the compressor buildings, York chiller, cooling tower, pump building, shaft heating building, hoist house with four hoists, head frames, and exhaust fans.

Conditions encountered during underground mining, specifically ground water inflows, heat and ambient radon concentrations, could require changes in the size and capacity of some of the mine support facilities. Such upgrades cannot be anticipated sufficiently at this time to precisely quantify changes in the designs made at a later date. If upgrades are made, they will be in the form of changes to existing units and will not be subject to the requirements of Rule 5.7C.

5.3 Plant Site - Surface Support Facilities

The units in this category are those units at ground surface that support the overall mine operation but do not provide direct support of underground operations, and that will be either removed from the site or converted to post-mining use after closeout. These facilities include the guard house, fire equipment building, service building, electrical substation, car shop, carpenter shop, electrical building, waste treatment building, storage building, core storage building, water tanks, fuel storage tanks, fan shop, septic tank, leach field, and water wells. Laboratory facilities for mineralogical assay, radiological monitoring and other technical testing services will be located in one of the aforementioned facilities to be determined at a later date.

5.4 Plant Site - Mine Water Treatment

Facilities that are used to treat and discharge water removed from the mine are included in this category. They include the flocculant treatment facility, barium chloride treatment facility, ion exchange (IX) plant, eight mine water lagoons, and the discharge pipeline. The treatment facilities and IX plant will be removed during closeout, and the pipeline will either be removed or converted to post-mining use.

5.5 Solid and Liquid Containments

These units include those facilities at ground surface used to contain storm water, waste rock removed from the mine, and ore stockpiled temporarily on site prior to shipment off site for milling. Specifically, these units include the waste pile, ore stockpile, and storm water retention ponds. An additional (new) waste pile is planned after resumption of operations. The design limits of these facilities are listed in Table 3.

6.0 ENVIRONMENTAL CONDITIONS AND IMPACTS

The Site Assessment (June 1994) and "An Environmental Baseline Study of the Mt. Taylor Project Area of New Mexico," March 1974, contain detailed discussions of environmental conditions and impacts at the Mt. Taylor Mine. The following is a summary of information contained in the Site Assessment.

6.1 Ground Water

Ground water occurs at the alluvium/bedrock contact and in more permeable portions of the Upper Menefee Formation. However, the shallowest aquifer capable of sustaining a potable water supply is the Lower Menefee at a depth of approximately 500 feet. Water supply wells at the mine and in the village of San Mateo pump potable water from approximately 650 feet from the Point Lookout Sandstone. Most drinking water used in the area is obtained from the Point Lookout Sandstone aquifer. Wells in the alluvium locally produce water for watering livestock. No changes in ground water quality had been detected in the shallow aquifers through the last date of sampling and testing in 1990, and no changes have occurred in the deeper aquifer (Point Lookout Sandstone) through April, 1994.

Ground water was pumped from the mine openings to enable mining to be advanced in the saturated Westwater Sandstone at a depth of 3100 feet. This water was pumped to the surface and treated with barium chloride to remove radium. Upon the completion of treatment, this mine water was discharged through a pipeline to the point of release approximately four miles north of the site in San Lucas Canyon. There have been no discharges in which the constituent levels exceeded discharge limits. When operations resume this method of ground water removal and treatment will also resume.

6.2 Surface Water

Two surface water drainages lie upgradient of the mine site and either cross the mine site or are adjacent to it. The larger of the two is San Mateo Creek located south of the site. Most of the watershed of San Mateo Creek is on the northwest flank of Mt. Taylor. Although this stream is perennial upstream and adjacent to the mine area, the surface water rapidly infiltrates into the stream bed, and by a distance of approximately two miles west of the village of San Mateo, San Mateo Creek becomes an ephemeral stream.

The second major surface water drainage system is Marquez Canyon located immediately north of the mine. This watershed collects water during heavy precipitation events only and is otherwise dry. Through all seasons of the year, Marquez Canyon is an ephemeral stream.

Within the mine site, surface drainage is intercepted and controlled by diversion ditches and below-grade collection systems. Surface runoff is channeled into retention ponds, and any surface water released from the site is treated prior to discharge. Treated mine water that is discharged through the pipeline becomes surface water at its point of discharge in San Lucas Canyon. During periods of discharge, this water has been available for consumption by livestock and wildlife. Because the water is treated prior to discharge, discharge limits for water quality are maintained. No mine water has been discharged since June 25, 1990.

6.3 Climatological Conditions and Air Quality

The climatic factors and weather records available for the area around Mt. Taylor Mine are discussed in the 1974 baseline study. In general the area of the mine has a semi-arid climate. There are no climatological factors which cause special concern for air quality at the mine site.

Underground air quality was sampled and monitored regularly before the cessation of mining. In particular, radon gas concentrations and exposures of all underground employees were documented and reported to the Mine Safety and Health Administration (MSHA) on a quarterly basis.

At ground surface, background levels of radon in 1972 and 1973 averaged 0.2 pci/l. Studies conducted in 1980 and 1981 indicated that there was no detectable increase of radon gas levels at surface locations in the village of San Mateo. More recent studies have shown very small increases in radon levels in the air around the mine's perimeter, fence, and near the San Mateo school.

Release of fugitive dust from road surfaces, the stockpile and waste pile has been controlled through the use of chemical suppressants, spraying of treated mine water, or soil cover. Such measures will be used in the future, as necessary, to suppress release of particulates.

6.4 Vegetation

Vegetation characteristics of the mine site were addressed in the environmental baseline study of 1974. According to the results of that study, the natural vegetation at the mine site is a transition from Grama-Galeta Steppe to Juniper-Pinon Woodland and to Pine-Douglas Fir Forest. The area has been considerably disturbed, primarily by ranching and logging operations, over the years prior to the development of the mine. The mine site itself is primarily a Grama Grassland. No rare or endangered plant species have been identified in the mine site or vicinity. The vegetation in the area of the Mt. Taylor Mine is described in detail in Chapter 8 of the 1974 baseline study.

6.5 Wildlife and Habitat

On the disturbed land within the fenced boundary of the Mt. Taylor Mine site, there is very little habitat or wildlife. Outside the fenced area the habitat for wildlife has been impacted by grazing and logging, resulting in a lower wildlife density than similar semi-arid and mountainous regions of the state of New Mexico. Rabbits, prairie dogs, mice, chipmunks, ground squirrels, coyotes, owls, elk, skunks, birds and deer are inhabitants or frequent visitors to the vicinity of the mine. The area around the Mt. Taylor Mine contains no habitat critical to the threatened or endangered species of Cibola and McKinley counties, as listed in the 6/7/94 letter from New Mexico Game and Fish Department in the appendix.

6.6 Socioeconomics and Cultural Resources

The Mt. Taylor Mine is located in a remote area of the northern edge of Cibola County and adjacent to the small village of San Mateo. Traditionally, ranching and logging have been the economic base for the area. Starting in the 1950's and through the early 1980's, uranium mining was the primary industry, providing employment for many residents in the area and stimulating immigration from outside the area. Since the collapse of the uranium market and closure of uranium mines and mills, most of this population has moved away or found employment in other industries.

On resumption of mining operations, the expected employment level at the Mt. Taylor Mine will be 180-200 people. This employment level is not expected to create substantial dislocations within the Grants/Milan/San Mateo community. However, it will provide some additional opportunities not presently available for employment as well as infuse the local economy with additional revenues.

The effects of mining, both good and bad, were established in the Grants/Milan/San Mateo area in the 1950's and persist through the present time. Therefore, the local culture has assimilated and adapted to the mining industry. Resumption of Mt. Taylor mining operations is not expected to have major impacts on cultural values or resources of the area.

7.0 UNDISTURBED VEGETATION AND SOILS

The 1974 baseline study indicated that there is virtually no undisturbed vegetation on or in the vicinity of the Mt. Taylor Mine site. This is due primarily to the premining history of intensive logging and livestock grazing throughout the area.

The natural vegetation of the Mt. Taylor Mine area has been characterized as a transition from Grama-Galeta Steppe to Pinon-Juniper Woodland to Pine-Douglas Fir Forest. A detailed vegetation inventory was conducted for the 1974 baseline study. A summary of soil and vegetation data from a more recent study, "Soil Survey of Cibola Area, New Mexico, Parts of Cibola, McKinley and Valencia Counties", U.S. Soil Conservation Service, 1993, is appended to this application.

8.0 OTHER PERMITS

8.1 Other State Permits

Permits required by the State of New Mexico for the Mt. Taylor Mine other than the permits resulting from this application are described in the Site Assessment. These include two discharge plans, DP-61 and DP-117. These discharge permits are for mine water discharge and surface retention (DP-61) and mill tailings discharge (DP-117). DP-61 expired March 30, 1994 and was renewed June 21, 1994. There are no discharges currently occurring under this permit, and RGR is in compliance with the requirements of this permit. DP-117 is inactive because there is no mill and no tailing discharge associated with the Mt. Taylor Mine at this time.

Two radioactive material licenses are in effect for the Mt. Taylor Mine. License No. DM 043-02, Use of Radioactive Materials for Laboratories, etc., expires December 31, 1995. No activity is being performed under this license at the present time. License No. IX 044-01 is for ion exchange (IX) plan operation and expires October 31, 1999. Because the IX plant is not presently in operation, there are no delinquencies or violations under this permit.

The Mt. Taylor Mine holds a permit for "Solid Waste Landfill for Mine and Mill." There is no expiration date associated with this permit, and there are no outstanding violations under this permit.

8.2 Federal Permits

Mt. Taylor Mine has two NPDES permits. Permit No. NM 0028100, Mine Water Discharge, expires July 17, 1998. This permit authorizes the surface discharge of treated mine water comingled with liquid waste water into an arroyo north of the mine site through the 24-inch pipeline. There have been no discharges under this permit since June, 1990, although the permit is still active. There are no outstanding violations under this permit. The other NPDES permit is for storm water discharges associated with the mining site. This permit expires July 17, 1998.

9.0 OPERATION PLAN

9.1 Mining Operations

The resumption of mining operations at the Mt. Taylor Mine is dependent upon the uranium market conditions, which are subject to influences and changes that cannot be accurately predicted at this time. However, it is anticipated that mining operations will resume not earlier than the year 2000 nor later than the year 2010. Approximately five years of preparatory activities will be required prior to the actual resumption of ore extraction from the mine. This five-year period will be required to remove ground water from the shafts, drifts, and surrounding host rock; for refitting and stabilization of the shafts; for installation of ventilation and electrical service to the underground spaces; and for the reactivation of surface support facilities. The actual configuration, sequence, and rate of mining will depend on ground conditions and ore grades as they are encountered during mining.

For planning purposes the underground mine space is intended to be limited by the vertical projection of the surface permit area. That is, mining will be conducted out to but not beyond the geographic limits of the permit area as defined on Figure 2.

As appropriate or necessary for stabilization of mine space, waste rock may be moved from one underground location to another, or from the surface waste pile to underground locations, to backfill and stabilize mine openings. The actual locations, volumes and rates of waste rock movement to or within the underground cannot be determined until mining operations resume underground.

9.2 Expected Concurrent Reclamation

Due to the type of mining conducted at the Mt. Taylor Mine, i.e. deep underground mining, there will be relatively little surface disturbance. The disturbance that has occurred to date represents the majority of total disturbance that will occur through the life cycle of the mining operation. Consequently, little if any concurrent reclamation is expected to be performed during the operating life of the mine, primarily because all surface facilities will remain active as long as any underground operations are being conducted. Until a detailed closeout plan is developed, the possibility of concurrent reclamation cannot be determined in detail; but at the time this permit application was prepared, RGR expects not to be able to conduct any concurrent reclamation during the mining period.

10.0 CLOSEOUT PLAN SCHEDULE

The closeout plan for the Mt. Taylor Mine has not been prepared at the time of this application and is not being submitted with this application. Instead, the closeout plan will be submitted not later than December 31, 1995 in compliance with the requirements of Rule 5.1B. The proposed schedule for the preparation of the closeout plan is described on Table 4.

11.0 PUBLIC NOTICES

In accordance with the requirements of Rule 9 of the New Mexico Mining Act rules, RGR will prepare and issue a public notice of its application for a permit as an Existing Mine operation. The public notice will conform to the outline and substance described under Rule 9.2. The approval draft of the public notice is appended to this application. The appendix also contains a list of the surface owners within 1/2 mile of the permit area as of November, 1994, per Rule 9.3A.

TABLE 1

SURFACE AND MINERAL OWNERSHIP

MT. TAYLOR URANIUM OPERATION

**MAP DETAIL OF SURFACE OWNERSHIP
WITHIN THE PERMIT BOUNDARY**

See Map for Acreage Tract Locations

A Rio Grande Resources Corporation
P. O. Box 1000
Hobson, Texas 78117

B Fernandez Company, Ltd.
Box 5000 - San Mateo Road
San Mateo, New Mexico 87050

C U.S.A - Forest Service
U.S. Department of Agriculture
2113 Osuna Road N.E., Suite A
Albuquerque, New Mexico 87113

***The Following Tracts are Subject to
Unpatented Mining Claims Owned as Follows:***

C-1 Arturo S. and Mary Lou Candelaria
George J. and Martina Z. Marquez
P. O. Box 33
San Mateo, New Mexico 87050

C-2 Arturo S. and Mary Lou Candelaria
P. O. Box 33
San Mateo, New Mexico 87050

C-3 Arturo S. and Mary Lou Candelaria
P. O. Box 33
San Mateo, New Mexico 87050

Harry M. and Patricia Ann Gonzales
P. O. Box 2974
Milan, New Mexico 87021

**MAP DETAIL OF SURFACE OWNERSHIP
WITHIN THE PERMIT BOUNDARY
(Continued)**

C-4 Rio Grande Resources Corporation
P. O. Box 1000
Hobson, Texas 78117

C-5 Rio Grande Resources Corporation
P. O. Box 1000
Hobson, Texas 78117

Ms. Vivian Thomas Trimble
52 B Patton Avenue
Princeton, New Jersey 08540

***The Following 3.35 Acre Tract is Subject to a
Right of Way for a 24-inch Pipeline Granted By:***

C-6 Forest Service
U.S. Department of Agriculture
2113 Osuna Road N.E., Suite A
Albuquerque, New Mexico 87113

D Arturo S. and Mary Lou Candelaria
P. O. Box 33
San Mateo, New Mexico 87050

Harry M. and Patricia Ann Gonzales
P. O. Box 2974
Milan, New Mexico 87021

See Ownership Map for Acreage Tract Locations

TABLE 1 (continued)
SURFACE AND MINERAL OWNERSHIP

MT. TAYLOR URANIUM OPERATION

MAP DETAIL OF MINERAL OWNERSHIP WITHIN THE PERMIT BOUNDARY *See Map for Acreage Tract Locations*

1 Rio Grande Resources Corporation
 P. O. Box 1000
 Hobson, Texas 78117

2 Sifredo Sandoval Estate and
 Ethel Sandoval
 P. O. Box 37
 San Mateo, New Mexico 87050

3 Fernandez Company, Ltd.
 Box 5000 - San Mateo Road
 San Mateo, New Mexico 87050

4 Arturo S. Candelaria
 P. O. Box 33
 San Mateo, New Mexico 87050

 Frederick B. and Hendrika M.E. Howden
 325 West Santa Fe
 Grants, New Mexico 87020

 Joseph T. and Mary Ann Michael
 P. O. Box 2636
 Milan, New Mexico 87021

 Eucario Candelaria
 P. O. Box 7
 San Mateo, New Mexico 87050

 Velma C. Ortega
 P. O. Box 3228
 Milan, New Mexico 87021

**MAP DETAIL OF MINERAL OWNERSHIP
WITHIN THE PERMIT BOUNDARY
(Continued)**

- 4 Viola C. Marquez
 P. O. Box 2238
 Milan, New Mexico 87021

- 5 Arturo S. and Mary Lou Candelaria
 P. O. Box 33
 San Mateo, New Mexico 87050

- 6 U.S.A - Bureau of Land Management
 New Mexico State Office
 P. O. Box 27115
 Santa Fe, New Mexico 87502-7115

***The Following Tracts are Subject to
Unpatented Mining Claims Owned as Follows:***

6-A Arturo S. and Mary Lou Candelaria
 George J. and Martina Z. Marquez
 P. O. Box 33
 San Mateo, New Mexico 87050

6-B Arturo S. and Mary Lou Candelaria
 P. O. Box 33
 San Mateo, New Mexico 87050

6-C Arturo S. and Mary Lou Candelaria
 P. O. Box 33
 San Mateo, New Mexico 87050

 Harry M. and Patricia Ann Gonzales
 P. O. Box 2974
 Milan, New Mexico 87021

See Ownership Map for Acreage Tract Locations

**MAP DETAIL OF MINERAL OWNERSHIP
WITHIN THE PERMIT BOUNDARY
(Continued)**

6-D Rio Grande Resources Corporation
P. O. Box 1000
Hobson, Texas 78117

6-E Rio Grande Resources Corporation
P. O. Box 1000
Hobson, Texas 78117

Ms. Vivian Thomas Trimble
52 B Patton Avenue
Princeton, New Jersey 08540

6-F *The current status of Mining Claims on Tract 6-F is unknown,
but any claim staked on the 3.35 acre tract would be subject
to a Right-of-Way for a 24-inch Pipeline, owned by
Rio Grande Resources Corporation (see address above).*

7 Arturo S. and Mary Lou Candelaria
P. O. Box 33
San Mateo, New Mexico 87050

Harry M. and Patricia Ann Gonzales
P. O. Box 2974
Milan, New Mexico 87021

8 Santa Fe Pacific Railroad Company
Attention Land Department
P. O. Box 27019
Albuquerque, New Mexico 87125

See Ownership Map for Acreage Tract Locations

12-8-94, BGH

TABLE 2
EVALUATION OF SUBSIDENCE POTENTIAL - MT. TAYLOR MINE

All lengths in feet, volumes in cubic feet, densities in pcf						
For Extraction Ratio of:	0.5	0.6	0.7	0.6	0.7	0.85
Mined Room-and-Pillar Panel Length, L	1000	1000	1000			
Mined Room-and-Pillar Panel Width, W	1000	1000	1000			
Mined Room-and-Pillar Panel Length, h	12	12	12			
Mined Stope Length, L				100	100	100
Mined Stope Width, W				75	75	75
Mined Stope Height, h				30	30	30
Mined Volume, Vv	6000000	7200000	8400000	135000	157500	191250
Angle of Draw, Ad	10	11	10	10	10	10
Initial Rock Density, Di of Subsided Zone	150	150	150	150	150	150
Swell Factor, S	1.3	1.3	1.3	1.3	1.1	1.1
Swelled-rock Density, Ds	115.4	115.4	115.4	115.4	136.4	136.4
Initial Rock Volume, Vi of Subsided Zone	20000000	24000000	28000000	450000	1575000	1912500
Total Volume, Vv+Vi	26000000	31200000	36400000	585000	1732500	2103750
Height of Subsidence above Mine Level for:						
Cone-shape Subsidence =	16.5	19.8	23.0	42.4	106.5	122.2
where:						
Base radius, RB =	707	707	707	63	63	63
Top radius, RT =	710	711	711	70	81	85
Ellipsoidal Subsidence	12.4	14.9	17.4	37.2	110.3	133.9
Straight-sided Prism (angle of draw = 0)	14.0	19.2	24.4	48.0	201.0	250.5

Frustum of Cone

$$\text{Volume} = \pi(H/3)(RB^2 + RB \cdot RT + RT^2)$$

where:

H = h + height of frustum (height of subsidence zone)

RB = radius of base = $((L/2)^2 + (W/2)^2)^{.5}$

RT = radius of top = $RB + (H \cdot \sin Ad)$

Semiellipsoid

$$\text{Volume} = 2\pi a \cdot b \cdot c / 3$$

where:

a = height

b, c = horizontal axes

Pyramidal Frustum

$$\text{Volume} = H/3(Ab + At + (Ab \cdot At)^{.5})$$

where:

Ab = area of base

At = area of top

H = h + height of frustum

TABLE 3

DESIGN LIMITS OF MINE UNITS - MT. TAYLOR MINE

UNIT NAME	FUNCTION	PLAN AREA acres	PLAN LENGTH feet	PLAN WIDTH feet	HEIGHT OR DEPTH feet	CAPACITY
MINE						
Underground Drifts, Stopes, etc.	Excavation of ore and haulage to shaft	4000				
Main Shaft	Hoisting to / from underground workings		24	24	3300	
Vent / Manway Shaft	Ventilation and crew hoisting		14	14	3300	
Section 30 Shaft	Ventilation and emergency hoisting		24	24	4400	
PLANT SITE	Mine support and surface support	213.9				
SOLID AND LIQUID CONTAINMENTS						
Waste Pile - Old	Storage / disposal of waste rock	11.5	745	675		935000 cy
Waste Pile - New	Storage / disposal of waste rock	21.7				2000000 cy
Ore Storage Pile	Storage of ore for off-site shipment	6.8	675	450		464350 cy
Storm Water Retention Ponds						
Waste Pile Retention Pond	Temporary holding and evaporation of runoff	2.1				9.9 AF
Storage Pile Retention Pond	Temporary holding and evaporation of runoff	1.6				9.9 AF
MINE WATER TREATMENT						
	Treatment, detention, and release of mine water	28				
Flocculant Treatment Facility	Addition of flocculant to remove solids					
Barium Chloride Treatment Facility	Addition of barium chloride to mine water					
Ion Exchange Plant	Recovery of uranium from water					
Mine Water Lagoons (total of 8)	Removal of particulates and radium from mine water; collection and detention of storm water; storage, transfer and discharge of water					each less than 10 AF
Mine Water Discharge Pipeline	Discharge of treated mine water	2	20200			10000 gpm
ACCESS ROAD	Site access	4.7	4100	50		

TABLE 4

CLOSEOUT PLAN PREPARATION SCHEDULE

Mt. Taylor Mine

<u>Closeout Plan Element</u>		<u>Starting Date</u>	<u>Time to Prepare</u>	<u>Completion Date</u>
1.0	Introduction and Summary	10/1/95	2 Weeks	10/15/95
2.0	Description of Mine and Operations (Summary of SA & PA info)	1/2/95	3 months	3/31/95
3.0	Post-Mining Land Use and Ecosystem	1/2/95	3 Months	3/31/95
4.0	Closeout Measures	4/1/95	6 Months	9/30/95
5.0	Other Permits Required for Closeout	4/1/95	5 Months	8/31/95

APPENDIX

- 1) State of New Mexico, Department of Game and Fish, letter of 6/7/94 re:
Threatened and Endangered Species
- 2) Summary of Soils and Vegetation Data
- 3) Draft Public Notice with List of Surface Owners Within 1/2 Mile of the
Permit Area

GOVERNOR
Bruce King



STATE OF NEW MEXICO
DEPARTMENT OF GAME & FISH

Villagra Building
P.O. Box 25112
Santa Fe, N.M. 87504

STATE GAME COMMISSION
JAMES H. (JAMIE) KOCH, CHAIRMAN
SANTA FE

THOMAS P. ARVAS, O.D., VICE-CHAIRMAN
ALBUQUERQUE

BOB JONES
CROW FLATS

J.W. "JOHNNY" JONES
ALBUQUERQUE

BRUCE WILSON
MESILLA PARK

DAVID M. SALMAN
LA CUEVA

ANDREA MAES CHAVEZ
NAVAJO DAM

DIRECTOR AND SECRETARY
TO THE COMMISSION
Bill Montoya

June 7, 1994

Mr. L.E. Lewis
Rio Grande Resources
828 Kingman Avenue
Grants, New Mexico 87020

Dear Mr. Lewis:

Enclosed please find lists of species designated by the Department of Game and Fish as threatened or endangered, which occur in Cibola and McKinley counties. This information is being provided pursuant to your request, made by telephone on June 3.

The Forestry Division of the Energy, Minerals and Natural Resources Department (827-5830) should be contacted for information regarding state-listed plant species and the U.S. Fish and Wildlife Service (883-7877) for information regarding federally-listed plant and wildlife species.

Sincerely,

Bill Montoya
Director

BM/jsp

Enclosure

cc: Richard McCleskey (Assistant Director, NMGF)
Andrew Sandoval (Conservation Services Division Chief, NMGF)
Dan Pursley (Northwest Operations Division Chief, NMGF)
Jim Bailey (Conservation Services Division Assistant Chief, NMGF)

Status List of State T&E Species:
in McKinley County

03 JUN 1994

INVERT NAME.....	SCIENTIFIC NAME.....	FEDERAL END.	FED.... THREAT.	FED... PROP.	FED... CAND.	STATE END.	STATE... THREAT.
(Zuni) Bluehead Sucker	Catostomus discobolus jarrovi	-	-	-	X	X	
Bald Eagle	Haliaeetus leucocephalus	X	-	-	-	-	X
American Peregrine Falcon	Falco peregrinus anatum	X	-	-	-	X	-
Arctic Peregrine Falcon	Falco peregrinus tundrius	-	X	-	-	X	-
(Southwestern) Willow Flycatcher	Empidonax traillii extimus	-	-	X	-	-	X
Gray Vireo	Vireo vicinior	-	-	-	-	-	X

Status List of State T&E Species:

03 JUN 1994

in Cibola County

INVERT NAME.....	SCIENTIFIC NAME.....	FEDERAL END.	FED.... THREAT.	FED.. PROP.	FED... CAND.	STATE END.	STATE.. THREAT.
(Zuni) Bluehead Sucker	Catostomus discobolus jarrovi	-	-	-	X	X	-
Bald Eagle	Haliaeetus leucocephalus	X	-	-	-	-	X
American Peregrine Falcon	Falco peregrinus anatum	X	-	-	-	X	-
(Southwestern) Willow Flycatcher	Empidonax traillii extimus	-	-	X	-	-	X
Gray Vireo	Vireo vicinior	-	-	-	-	-	X
Spotted Bat	Euderma maculatum	-	-	-	X	-	X

SUMMARY OF SOILS AND VEGETATION DATA

from "Soil Survey of Cibola Area, New Mexico, Parts of Cibola, McKinley and Valencia Counties", U.S.

Soil Conservation Service, 1993

The general soil type of the mine site and vicinity is the Penistaja-San Mateo-Sparenk soil group consisting of clay loam soils (locally classified as the San Mateo clay loam) formed in mixed alluvium and supporting native vegetation consisting mainly of grasses and shrubs. The typical undisturbed soil profile consists of a surface layer of light brownish-gray clay loam about 6 inches thick underlain by light brownish-gray clay loam about 16 inches thick. Below this layer is a brown sandy clay loam about 60 inches thick. Permeability is moderate and available water capacity is high. The effective rooting depth is 60 inches. Runoff is slow and the hazard of water erosion is slight. However, soil blowing can be severe. Plant species most likely to thrive in this soil are those tolerant of alkalinity and a high calcium carbonate content. This soil generally occupies the flatter areas in and around the mine site, especially to the west of the plant complex.

In areas along the east side of the mine site, especially on the steeper slopes directly east of the plant area, the soil is classified as Poley-Pojoaque very cobbly loam which supports native vegetation of grasses, shrubs and trees. The Poley soil is deep and well-drained, having been derived primarily from sandstone and shale. The surface layer of about two inches is dark brown very cobbly loam underlain by dark brown gravelly clay loam about 16 inches thick. The lowest portion of the soil is about 60 inches of yellowish-brown loam. Some areas of subsoil contain more than 35% rock fragments. The permeability of the Poley soil is low, and available water capacity is high. Effective rooting depth is 60 inches. Runoff is medium, hazard of water erosion is moderate, while hazard of soil blowing is slight.

The Pojoaque soil is deep and well-drained and is also predominantly derived from shale and sandstone. The surficial layer of about three inches consists of brown very cobbly loam which is underlain by about four inches of brown gravelly clay loam. The lowest portion of this soil is about 60 inches of light yellowish-brown and very pale brown cobbly clay loam and gravelly sandy clay loam containing up to 35% rock fragments. Pojoaque soil is moderately permeable with high available water capacity, effective rooting depth of 60 inches, medium runoff potential, and moderate hazard of water erosion and soil blowing. The natural plant community on the Poley-Pojoaque soils consists of blue grama, sideoats grama, black grama, New Mexico feathergrass, and sacahuista. Average annual production of air dry vegetation ranges from 750 pounds per acre in favorable years to 375 pounds per acre in unfavorable years.

Immediately north of the mine site, the soils belong to the Sparenk-San Mateo complex. This soil group supports native vegetation of mainly grasses and shrubs. The Sparenk soil consists of clay loam derived from mixed alluvium. The soil is typically deep and well-drained with the surface layer consisting of light yellowish-brown clay loam about two inches thick underlain by about 60 inches of light yellowish-brown and light olive brown silty clay. The Sparenk soil permeability is very slow and available water capacity is very high. Effective rooting depth is 60 inches, runoff is slow, and the hazard of water erosion is moderate. However, the hazard of soil blowing is severe.

The San Mateo soil is deep and well-drained and is also derived from mixed alluvium. It is typically characterized by a surface layer of two inches of light yellowish-brown loam underlain by 27 inches of light olive brown loam and sandy clay loam. The lowest part of the soil is typically 60 inches of light olive brown sandy clay loam with thin strata of sandy loam to silty clay loam. The permeability of the San Mateo soil is moderate, available water capacity is high, and effective rooting depth is 60 inches. Runoff is medium, the hazard of water erosion is moderate, and the hazard of soil blowing is severe. The potential natural plants community of the Sparenk-San Mateo complex is mainly Western Wheatgrass, vine mesquite, alkali sacatone, and fourwing saltbush. Average annual production of air dry vegetation ranges from 3200 pounds per acre in favorable years to 1250 pounds per acre in unfavorable years. Deteriorating plant communities result in the decrease of Western Wheatgrass, vine mesquite, alkali sacatone, and winterfat; but an increase in blue grama, gelata, broom snakeweed and rabbit brush.

The area south of the mine site contains the Rock Outcrop-Vessilla-Mion complex. This is a soil typically found on rocky terrain on which the native vegetation is primarily trees and shrubs. This complex is not readily characterized by profiles because of the great variation vertically and laterally in soil characteristics. Vessilla soils typically have moderately rapid permeability, low available water capacity, effective rooting depth of 6-20 inches, rapid runoff, and severe hazard of water erosion and soil blowing. Mion soil is shallow and well-drained with very low permeability. The available water capacity of this soil is very low, and the effective rooting depth is only 10-20 inches. Runoff is rapid, and the hazard is severe for both water erosion and soil blowing. In the areas of Mion soil, the site index for pinon and juniper is 20; and in Vessilla soils the index is 58.

Within the areas disturbed by activity on the Mt. Taylor Mine site, the soils are presently classified as the Dumps-Pits complex. The original soil in its undisturbed state was probably one or more of the soil groups described above. Dumps-Pits complex is characterized more by the nature and extent of disturbance than by the physical characteristics of the original soils.

The vegetation units correspond approximately with the above-described soil complexes. Specifically, to the north of the site and on the site itself, the vegetation unit is primarily Grama Grassland. To the east and south on the steeper terrains, the vegetation unit is primarily the Pinon-Juniper Slope group. Detailed descriptions of the vegetation communities are contained in the 1974 baseline study.

DRAFT PUBLIC NOTICE

Rio Grande Resources Corporation (RGR) has submitted an APPLICATION FOR PERMIT AS AN EXISTING MINE for its MOUNT TAYLOR MINE in accordance with the provisions of the New Mexico Mining Act, Sections 69-36-1 through 69-36-20, NMSA 1978 and the New Mexico Mining Act Rules of July 12, 1994. The mine is located in the east half of Section 24, T13N, R8W, NMPM in Cibola County, New Mexico near the village of San Mateo.

The Mt. Taylor Mine extracts uranium ore from depths of over 3,000 feet below ground surface using room-and-pillar and stope mining methods. There are no milling facilities within the proposed permit area. Uranium ore was first produced from the Mt. Taylor Mine in 1979 until September 30, 1982 and again from October, 1985 until January, 1990.

The proposed permit area for the Mt. Taylor Mine includes the plant site and mine support surface facilities consisting of 285.6 acres and approximately six square miles of additional area for a proposed total permit area of 4006.7 acres. The proposed permit area is delineated on Figure III in the Site Assessment and on Figure 2 in the application. The permit area includes the following:

T12N, R7W, N.M.P.M.:

Section 5:	All	640 acres
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T13N, R7W, N.M.P.M.:

Section 18:	S 1/2	320 acres
Section 19:	All	640 acres
Section 29:	W 1/2	320 acres
Section 30:	All	640 acres
Section 31:	N 1/2 and SE 1/4	480 acres
Section 32:	NW 1/4 and S 1/2	480 acres

T13N, R8W, N.M.P.M.:

Section 24:	E 1/2	320 acres
Section 25:	NE 1/4	160 acres

Pipeline Corridor:

From N 1/4 Corner Section 24 to
point of discharge in T14N,
R8W, Total Length - 20,200 feet

2 acres

Access Road

From the NE/NW/NW Section 24 to the
center of Section 24, length 4100 feet,
width 50 feet

4.7 acres

TOTAL

4,006.7 acres

The permit applicant's address is:

Mt. Taylor Mine
Rio Grande Resources Corporation
P.O. Box 1150
Grants, NM 87020
505-287-7971

Written comments may be submitted to:

Director, Mining and Minerals Division
Energy, Minerals and Natural Resources Department
State of New Mexico
2040 South Pacheco
Santa Fe, New Mexico 87505

A copy of the Permit application is available for public inspection at the Public Library in Grants, New Mexico.

*Missing 7.2 E ... for
regarding ...*

OWNERS OF SURFACE LAND WITHIN 1/2 MILE OF THE PERMIT AREA AS OF NOVEMBER, 1994
RIO GRANDE RESOURCES, MT. TAYLOR MINE

Name	Address
Apodaca, Gehard & Rose Marie	406 Foothill SW, Albuquerque, NM 87105
Baca, Claudio	Box 503, San Mateo, NM 87050
Baca, Santiago	2047 Perry Rd. SW, Albuquerque, NM 87105
Baca, Rosalid & Ruma	Box 1211, Grants, NM 87020
Barela, Alfredo	Box 14, San Mateo, NM 87050
Barela, Maximiliano	Box 26, San Mateo, NM 87050
Barnes, Jessie	Box 30, San Mateo, NM 87050
Candelaria, Felix Jr.	1840 Los Lentes NE, Los Lunas, NM 87031
Candelaria, Gabriel	Box 33, San Mateo, NM 87050
Chavez, Fernandez & Emilia	Box 145, Grants, NM 87020
Chavez, Octaviano	Box 25, San Mateo, NM 87050
Congregational Church San Mateo	General Delivery, San Mateo, NM 87050
Craig, Veronica & Saiz, James	Box 34, San Mateo, NM 87050
Craig, Veronica T or Eddy L	Box 34, San Mateo, NM 87050
De Soto, Dulcinea	Box 92, Curdero, NM 87014
Diaz, Alfred & Fidelina	Box 9, San Mateo, NM 87050
Fernandez Co. Limited, Lee Ranch	5000 San Mateo Rd., San Mateo, NM 87050
Gonzales, Alcario	P.O. Box 3662, Milan, NM 87021
Gonzales, Fred	1201 Clovis, Grants, NM 87020
Gonzales, Eugene W.	Box 25, San Mateo, NM 87050
Gonzales, Telesfor E. & Josie	Box 12, San Mateo, NM 87050
Hernandez, M.D. & Gloria	c/o Rodriquez, Johnny & Rose, Box 518, San Mateo, NM 87050
Hobbs, John H. & Teresita	Box 47, San Mateo, NM 87050
La Morada de San Mateo	c/o Salazar, Fidencio R., Box 29, San Mateo, NM 87050
Lupez, Eddy Paul	P.O. Box 893, Grants, NM 87020
Lucero, Bennie & Francisca	P.O. Box 3233, Milan, NM 87021
Maestas, Leonard & Sarah	P.O. Box 601, Cuba, NM 87013
Marquez Ranches	P.O. Box 3526, Milan, NM 87021
Marquez, Perfilio & Elizabeth	Box 18, San Mateo, NM 87050
Marquez, Rudy	1604 Zena Loma NE, Albuquerque, NM 87112
Marquez, Isabel & Soloman	Rio Grande Resources Corp., P.O. Box 85608, San Diego, CA 92186
Marquez, Margaret & Ivan	1201 N. 1st St., Grants, NM 87020

Marquez, Tomas & Margaret	1201 N. 1st St., Grants, NM 87020
Marquez, Viola	Box 8, San Mateo, NM 87050
Martinez, Prudencio Jr. & Pauline	Box 24, San Mateo, NM 87050
Martinez, Polito Jr.	1379 San Jose Dr., Grants, NM 87020
Michael, Ernest & Mary	Box 16, San Mateo, NM 87050
Mirabal, Moises	1305 N. 2nd St., Grants, NM 87020
Montano, Edwardo; Heirs of	1011 Hwy. 85 NW, Los Lunas, NM 87031
Montano, Frank	c/o Montano, Manuel; General Delivery, San Rafael, NM 87051
Montano, Eugenio C. or Lisa L.	5416 Cresswell Rd. SW, Albuquerque, NM 87105
Ortega, Lloyd G. Jr. or Arcelia	P.O. Box 3228, Milan, NM 87021
Ortega, Ernest & Veneranda	P.O. Box 1802, Lovelock, NV 89820
Ortega, Garry G. & Ida	P.O. Box 1436, Lovelock, NM 89419
Ortega, Lloyd Gilbert	P.O. Box 3228, Milan, NM 87021
Ortega, Tomas	c/o Ortega, Margarita; Box 22, San Mateo, NM 87050
Ortiz, Cecilia Marquez	100 Carey Rd., Corrales, NM 87048
Rodriquez, Johnny D.	Box 518, San Mateo, NM 87050
Romero, Reyes	Box 27, San Mateo, NM 87050
Salazar, Abelino	Box 24, San Mateo, NM 87050
Salazar, Bennie & Monica	Box 509, San Mateo, NM 87050
Salazar, Carlota	828 Bratton, Grants, NM 87020
Salazar, Herman & Angela	Box 31, San Mateo, NM 87050
Salazar, Arsenio & Elizabeth Jean	Box 502, San Mateo, NM 87050
Salazar, Edwin & Florentina	Box 11, San Mateo, NM 87050
Salazar, Remijio & Beatrice	Box 11, San Mateo, NM 87050
Salazar, Virginia	P.O. Box 7027, Grants, NM 87020
San Mateo Cemetery	General Delivery, San Mateo, NM 87050
Sandoval, Sifredo	Box 37, San Mateo, NM 87050
Sandoval, Alfredo	c/o Bertelly, Priscilla, P.O. Box 1285, Gallup, NM 87305
Sandoval, Andy	P.O. Box 1793, Las Cruces, NM 88004
Sandoval, Sifredo	c/o Sandoval, John & Patricia; Box 35, San Mateo, NM 87050
School, Comm San Mateo	General Delivery, San Mateo, NM 87050
U.S.G. Natl. Park Service	P.O. Box 1782, Santa Fe, NM 87501
Candelaria, Arturo S.	P.O. Box 33, San Mateo, NM 87050
& Gonzales, Harry M.	

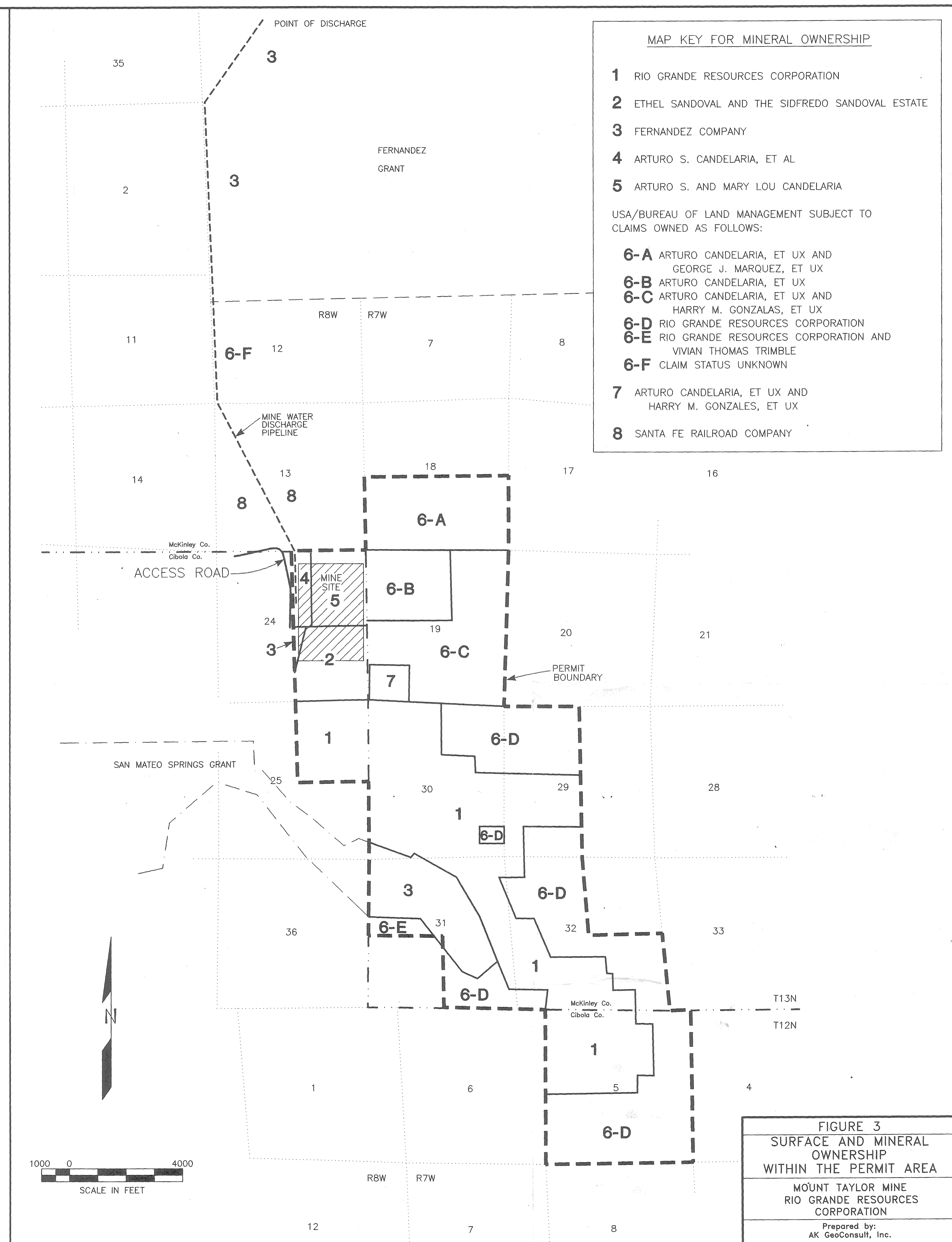
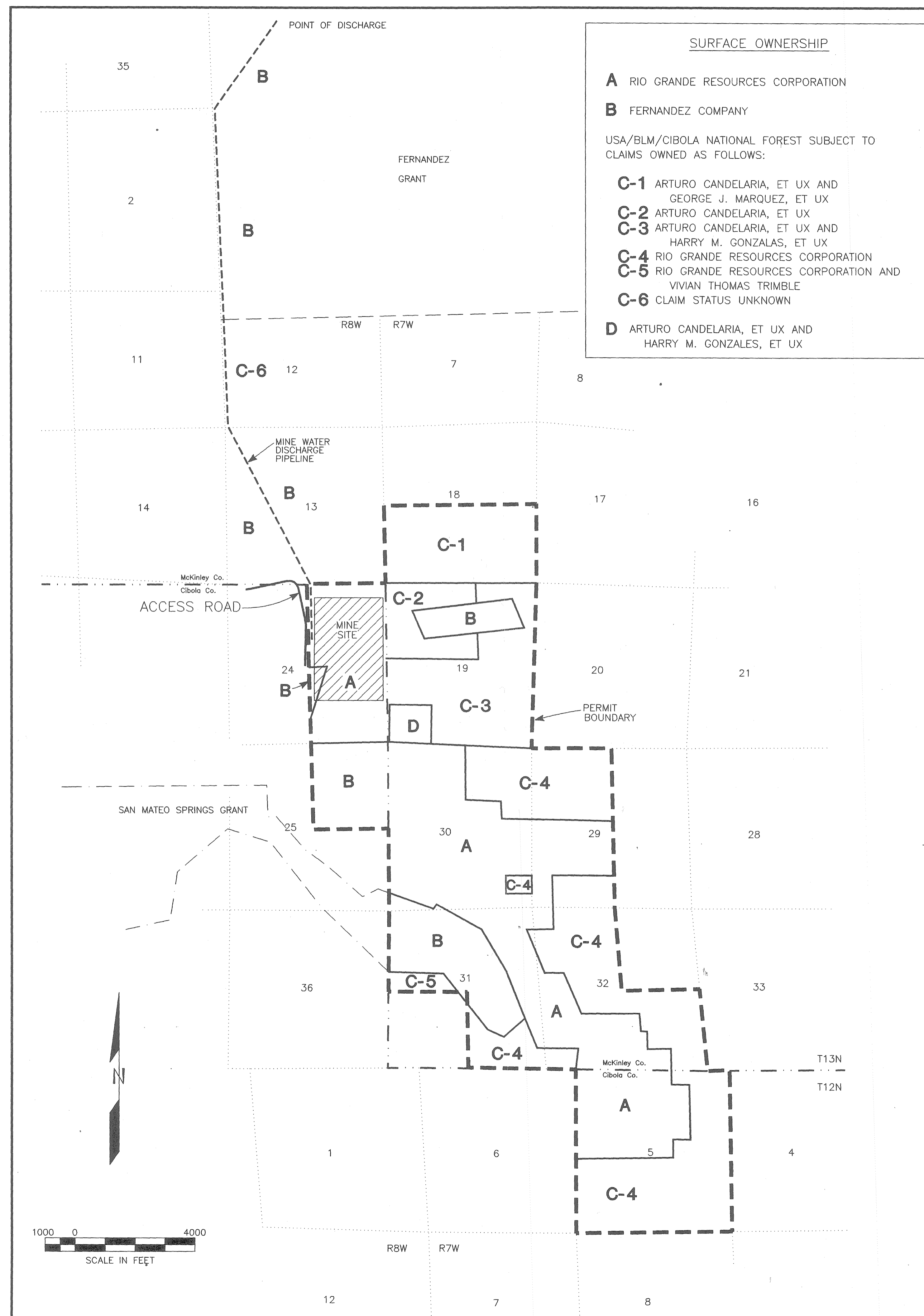
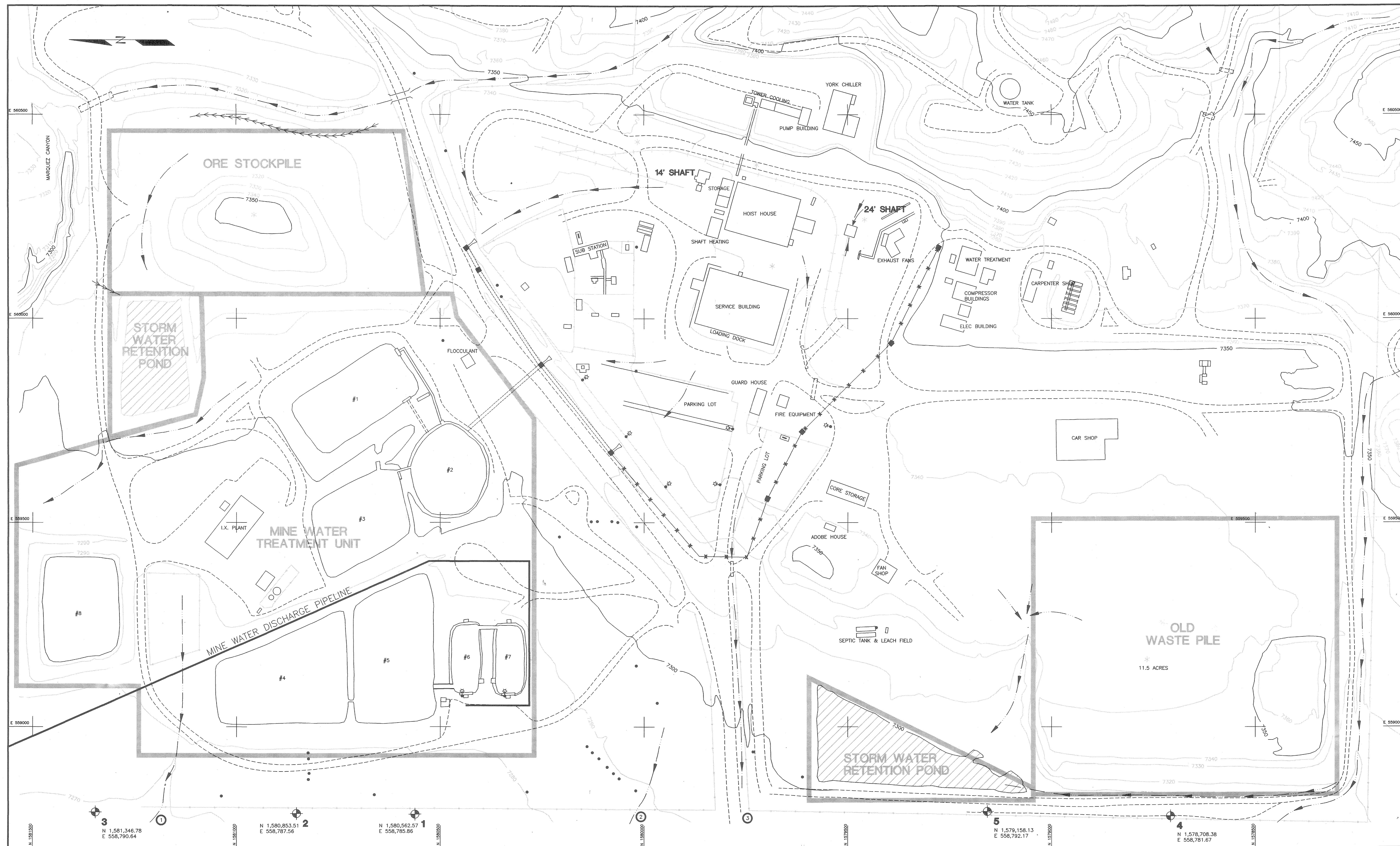


FIGURE 3
SURFACE AND MINERAL OWNERSHIP WITHIN THE PERMIT AREA
 MOUNT TAYLOR MINE
 RIO GRANDE RESOURCES CORPORATION
 Prepared by:
 AK GeoConsult, Inc.



LEGEND

- | | | | |
|------------------|----------------------------|---------------------------|---|
| RAILROAD | STORM DRAIN LINE | CULVERT | LIGHT POLE |
| CHAIN LINK FENCE | STORM DRAIN | MONITOR WELL | 1000' MODIFIED NEW MEXICO STATE PLANE GRID COORDINATE (WEST ZONE) |
| INDEX CONTOUR | STORM WATER OUTFALL | RESIDUAL RADIOACTIVE SOIL | |
| FLOW LINE | STORM WATER RETENTION POND | BUILDING | |
| EARTH DIKE | CURBED FUEL STORAGE | UTILITY POLE | |

NOTES

- THIS MAP WAS DIGITIZED INTO AutoCAD format by WATER, WASTE & LAND, INC., ON NOVEMBER 15, 1994, FROM MAPPING SUPPLIED BY RIO GRANDE RESOURCES.

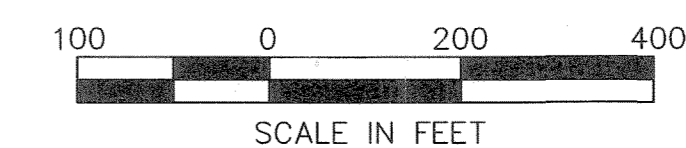


FIGURE 4

PLANT AREA

MOUNT TAYLOR MINE
RIO GRANDE RESOURCES
CORPORATION

Prepared by:
AK GeoConsult, Inc.

